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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/537,390

01/31/2007

Adrian Kendall

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EXAMINER

DOAN, JENNIFER

ART UNIT

PAPER NUMBER

2874

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/537,390	<b>Applicant(s)</b> KENDALL, ADRIAN	
	<b>Examiner</b> JENNIFER DOAN	<b>Art Unit</b> 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 24-31 and 39-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-11, 13-23, 32 and 33 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 12 and 34-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>072705</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 1-23 and 32-38 in the reply filed on 3/24/08 is acknowledged.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

3. All of the prior art documents cited by applicant in the Information Disclosure Statement filed on 07/27/05, have all been considered and made of record (note the attached initialed copy of form PTO-1449).

### ***Drawings***

4. The drawings, filed on 01/31/07, are accepted.

### ***Specification***

5. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 6-11, 13, 14, 16-19, 23 and 32-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Kwon et al. (U.S. 6,190,056).

With respect to claim 1, Kwon et al. (figure 4A) disclose an apparatus for aligning and fixing an optical fibre relative to an optical source, comprising first and second fixing brackets, each fixing bracket including a support member (412) for attachment to a substrate; first and second cantilever arms extending from the support member (412) in opposing directions, each cantilever arm including fibre engagement means (414, 415) for engaging with the optical fibre (406); the apparatus further comprising a substrate (11) (column 6, lines 22-23) including support means for receiving the support members (412) so as to dispose the first and second fixing brackets such that the fibre engagement means (414, 415) of the first fixing bracket oppose the fibre engagement means of the second fixing bracket (see figure 4A), for receiving and supporting an optical fibre therebetween at two longitudinal positions of the optical fibre (406) (see figure 4A).

With respect to claim 2, Kwon et al. (figure 4A) disclose the apparatus, in which the first and second cantilever arms are of unequal length (see figure 4A).

With respect to claim 6, Kwon et al. (figure 4A) disclose the apparatus in which the cantilever arms have a rectangular cross-section (see figure 4A).

With respect to claims 7-9, Kwon et al. disclose apparatus, in which at least one of the cantilever arms has varying cross-sectional area along its length; wherein the at least one cantilever arm has a tapering cross-sectional area along its length and at least one cantilever arm has a step change in cross-sectional area along its length (see figures 4A and 4B).

With respect to claim 10, Kwon et al. (figure 4A) disclose the apparatus of claim 1 in which the support members each comprise a channel running therethrough (see figure 4A).

With respect to claim 11, Kwon et al. (figure 4A) disclose the apparatus in which the channel runs substantially orthogonal to an axis extending between the fibre engagement means (414, 415, see figure 4A).

With respect to claims 13 and 14, Kwon et al. disclose the apparatus, in which the fibre engagement means comprises a finger (413) laterally from each one of the first and second cantilever arms and h each finger (413) includes an engagement surface for coupling to a wall of the optical fibre (406).

With respect to claim 16, Kwon et al. (figure 4A) disclose the apparatus, further including an optical fibre (406) positioned between and supported by the fibre engagement means.

With respect to claim 17, Kwon et al. (figure 4A) disclose the apparatus, further the optical fibre (406) is coupled to an engagement surface of each of the respective fibre engagement means by way of a sport weld (column 3, lines 57-61).

With respect to claim 18, Kwon et al. (figure 4A) disclose the apparatus, in which the optical fibre (406) includes a sleeve encasing an optical carrier.

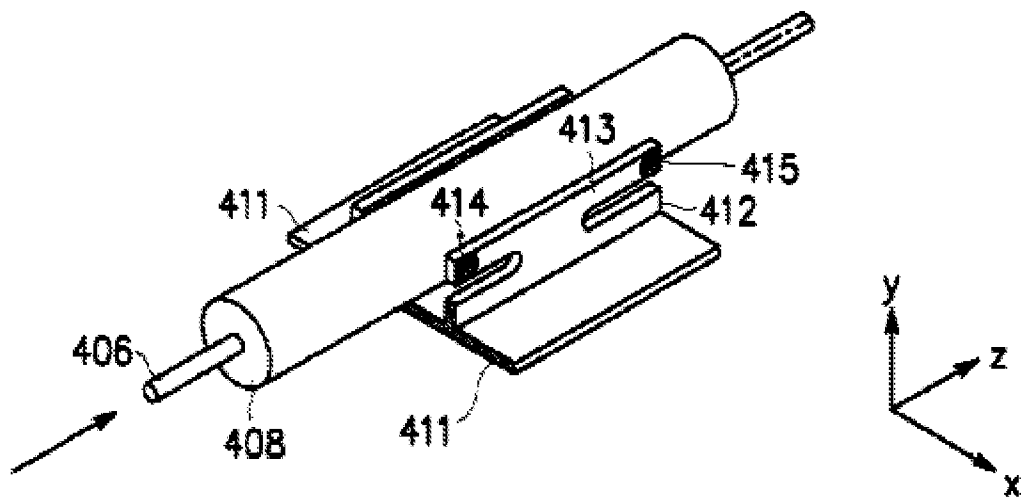
With respect to claim 19, Kwon et al. disclose the apparatus, further including an optical source fixed directly to the substrate or to an intermediate support means attached to the substrate.

With respect to claim 23, Kwon et al. disclose the apparatus, in which the optical source is a semiconductor laser diode (column 6, lines 57-58).

With respect to claim 32, Kwon et al. disclose (figure 4A) a method for aligning and fixing an optical fibre relative to an optical source comprising the steps of positioning first and second fixing brackets on a substrate (11) such that first and second fibre engagement means (414, 415) of the first fixing bracket oppose first and second fibre engagement means of the second fixing bracket (figure 4A); positioning an optical fibre (406) intermediate the first and second fixing brackets for support therebetween at two longitudinal positions of the fibre; securing the first and second fixing brackets to the optical fibre (406) at the points of contact of the fibre engagement means (414, 415) to the fibre; and adjusting the fibre alignment relative to the optical source (column 2, lines 46-48).

Art Unit: 2874

With respect to claim 33, Kwon et al. disclose (figure 4A) disclose the method, further including the steps of, after positioning the optical fibre, aligning the fibre to the optical source (column 2, lines 46-48) securing the first and second fixing brackets to support means included on the substrate (11).

**FIG. 4A**

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3, 15 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwon et al. (as cited above).

With respect to claim 3, Kwon et al. substantially discloses all the claimed limitations except the first cantilever arms are at least five times as long as the second cantilever arms.

However, the first cantilever arms are at least five times as long as the second cantilever arms is considered to be obvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Kwon to include the above feature with the value as claimed for the purpose of obtaining good protection for the optical fibers, and it also has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and it is noted that the applicant does not disclose criticality in the value claimed. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) (see MPEP § 2144.05).



With respect to claims 3 and 5, Kwon substantially discloses all the claimed limitations except each of the cantilever arms is plastically deformable.

However, each of the cantilever arms being plastically deformable is consider to be obvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the cantilever arms of Kwon's device by the materials as claimed for the purpose of obtaining good protection for the optical fibers. It is also noted that it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

With respect to claims 20-22, Kwon substantially discloses all the claimed limitations except the first and second fixing brackets are formed from a metal suitable for welding and in which the substrate is formed from a metal suitable for welding and the support means are formed from a metal suitable for welding.

However, the first and second fixing brackets are formed from a metal suitable for welding and in which the substrate is formed from a metal suitable for welding and the support means are formed from a metal suitable for welding are also consider to be obvious. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the first and second fixing brackets, the substrate and the support means of Kwon's device by the materials as claimed for the purpose of obtaining good protection for the optical fibers. It is also noted that it has been held to be within the general skill of a worker in the art to select a known material

on the basis of its suitability for the intended use as a matter of obvious design choice.

*In re Leshin*, 125 USPQ 416.

### ***Allowable Subject Matter***

10. Claims 4, 5, 12 and 34-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to disclose or suggest the apparatus, in which the first and second cantilever arms have different cross-sectional areas as recited in claim 4; in which the second cantilever arm has a greater cross-sectional area than the first cantilever arm as recited in claim 5; wherein the support means comprise a pair of blocks each adapted to engage with the respective channel of a respective support member as recited in claim 12 and the method, in which the step of adjusting the fibre alignment comprises the steps of distorting a first cantilever arm of each of the first and second fixing brackets; generating a resultant distortion in a second cantilever arm of each of the first and second fixing brackets in response to the distortion in the first cantilever arm; and correcting the alignment of the optical fibre as a consequence of the cantilever arm distortions as recited in claim 34.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-

Art Unit: 2874

2346. The examiner can normally be reached on Monday to Thursday from 6:00am to 3:30pm, second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*/Jennifer Doan/  
Primary Examiner, Art Unit 2874*